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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,568	12/31/2003	Don J. Nguyen	42P17639	5721
59796 7590 04/24/2007 INTEL CORPORATION c/o INTELLEVATE, LLC P.O. BOX 52050 MINNEAPOLIS, MN 55402			EXAMINER KAPLAN, HAL IRA	
			ART UNIT	PAPER NUMBER
			2836	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

11

Office Action Summary	Application No. 10/750,568	Applicant(s) NGUYEN ET AL.	
	Examiner Hal I. Kaplan	Art Unit 2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5-16,18-20 and 24-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14 and 30 is/are allowed.
- 6) ☒ Claim(s) 1,5,10-13,15,16,18-20,27-29 and 31-34 is/are rejected.
- 7) ☒ Claim(s) 6-9 and 24-26 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 6-9 and 24-26 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claims 6 and 24 recite the limitation "a power source selector to selectively couple either the system charger VR to the output power rail or the battery pack port to the output power rail. Claims 8 and 25 recite the limitation "a power source selector to selectively couple any one of the system charger VR and the plurality of battery pack ports to the output power rail". These limitations are inconsistent with the claimed system charger VR simultaneously powering both the output power rail and the battery unit at claim 1, lines 9-12 and claim 20, lines 12-15 because if a battery pack port is coupled to the output power rail, then the system charger VR cannot also be coupled to the output power rail; and if the system charger VR is coupled to the output power rail, then the battery pack port cannot also be coupled to the output power rail; thus, with the claimed power source selector, the system charger VR cannot simultaneously power both the output power rail and the battery unit, since only one of the system charger VR and the battery unit can be connected to the circuit at a time. Claims 7, 9, and 26 inherit this deficiency.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 5, 10, 11, 16, 18-20, 27, 28, and 32-34 are rejected under 35 U.S.C. 102(b) as being anticipated by the US patent of Matsuyama (6,384,570).

As to claims 1, 16, and 20, Matsuyama, drawn to a battery pack and charge circuit therefor, discloses a system comprising: a mobile computer (3) (see column 1, lines 12-14 and column 8, lines 26-29); and a power apparatus for the mobile computer, comprising an input power port (5); an output power rail (9), to supply power to a load (3) powered by the apparatus; a battery unit (8); and a system charger voltage regulator (VR) (7) to couple the input power port (5) to the battery unit (8), wherein the battery unit (8) is coupled with the system charger VR (7) and the output power rail (9), wherein the system charger VR (7) is to provide a regulated voltage signal when a power source is coupled to the input power port (5), the regulated voltage signal to simultaneously power both the output power rail and the battery unit (see column 3, lines 53-58 and column 4, lines 46-50), and wherein the battery unit (8) is to provide a battery voltage signal to power the output power rail (9) when no power source is coupled to the input power port (5) (see column 4, lines 30-33; column 5, lines 44-47; column 6, lines 17-23; and Figures 3-4).

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As to claims 5 and 18, the power source comprises a solar panel (4) (see Figure 3).

As to claims 10 and 27, the output power rail extends beyond the battery unit (8) to couple the system charger VR (7) to the battery unit (8) (see Figure 4).

As to claims 11 and 28, the mobile computer comprises at least one battery pack port to receive a battery pack (see column 1, lines 12-14).

As to claim 19, the battery (8) is recharged when it is discharged (see column 3, lines 53-58 and column 5, lines 44-47).

As to claims 32-34, it is inherent that the regulated voltage signal and the battery voltage signal have a common upper bound and a common lower bound because if the power is not maintained within a specific voltage range, the load device (3) will fail to operate.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
7. Claims 12, 13, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuyama in view of the US patent of Takano et al. (6,683,439).

As to claims 12, 13, and 29, Matsuyama discloses all of the claimed features, as set forth above, except for the claimed switch. Takano, drawn to a DC power source unit with battery charging function, discloses a similar apparatus comprising a switch (32) to selectively couple the battery pack port (5) to the output power rail for charging the battery pack (5) (see column 4, lines 41-47 and Figure 2). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to have used the technique of Takano with the apparatus of Matsuyama, in order to prevent excessive discharge of the battery when the main power source is available.

8. Claims 15 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsuyama.

As to claims 15 and 31, Pinder discloses all of the claimed features, as set forth

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above, except for a plurality of battery pack ports. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to connect multiple batteries to the device of Pinder, because it has been held that mere duplication of parts has no patentable significance unless a new and unexpected result is produced (*In re Harza*, 274 F.2d 669, 124 USPQ 378 (CCPA 1960)). See MPEP §2144.04(VI)(B).

Allowable Subject Matter

9. Claims 14 and 30 allowed.

10. The following is an examiner's statement of reasons for allowance:

Claims 14 and 30 are allowed because none of the prior art of record discloses or suggests a battery pack comprising a switch control port to receive a switch control signal from the battery pack port, and a switch to selectively couple the battery stack to the battery stack port based at least in part on the switch control signal, in combination with the remaining claimed features.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

11. Applicant's arguments, see Remarks, filed February 20, 2007, with respect to the objections to the drawings have been fully considered and are persuasive. The objections to the drawings have been withdrawn.

12. Applicant's arguments with respect to claims 1, 5, 10-13, 15, 16, 18-20, 27-29, and 31 have been considered but are moot in view of the new ground(s) of rejection.

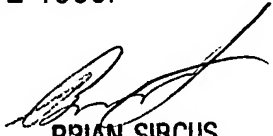
Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The US patents of Lewis et al. (5,510,659) and Kogan et al. (7,019,420) disclose similar systems.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal I. Kaplan whose telephone number is 571-272-8587. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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